# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of

Unlicensed Operation in the TV **Broadcast Bands** 

ET Docket No. 04-186

# Reply of Nominet to the Petition for Reconsideration of the National Association of Broadcasters

Nominet hereby responds to the National Association of Broadcaster's submission<sup>1</sup>, relating to the petition for reconsideration of approval for Nominet to operate its white space database system to provide service to the public<sup>2</sup>. We welcome the opportunity to respond and address these concerns directly.

We fully recognise the importance of protection for TV broadcasters and other incumbents, and Nominet is strongly committed to ensuring the accuracy of the service we provide.

Upon publication of the NAB filing on Friday 19 October, we promptly reviewed our Licensing Management System (LMS) data import process and rectified the identified discrepancies. These changes were applied to our operational TV White Space database on Wednesday 24 October. Details about the changes to the database can be found in the Appendix.

We would further encourage any stakeholders to engage with Nominet directly<sup>3</sup> to ensure protection of their services and end users.

<sup>&</sup>lt;sup>1</sup> Petition for reconsideration of the National Association of Broadcasters, Petition for Reconsideration, ET Docket No. 04-186 (Oct. 19, 2018).

<sup>&</sup>lt;sup>2</sup> Office of Engineering and Technology Announces the Approval of Nominet UK's White Space Database System for Operation, Public Notice, ET Docket No. 04-186, DA 18-966 (Sept. 19, 2018).

<sup>&</sup>lt;sup>3</sup> tvws@nominet.com

### 1. Import procedure from FCC

#### NAB asserts that:

"Nominet's white spaces database provides incorrect channel availability information at more than three out of four tested sites. This is because Nominet is pulling the wrong information from FCC files and, as a result, has incorrect channel information for hundreds of television stations. Nominet must be decertified as a database administrator until it can convince the Commission it has corrected every one of these errors. NAB will be happy to work with the Commission and Nominet to ensure that this happens."

#### **Nominet Response:**

We thank NAB for providing detailed information about the tests that have been conducted on the database. We have reviewed each case in detail and revised our data import system procedure.

The discrepancies were due to the difficulty of importing data from the Licensing and Management System (LMS)<sup>4</sup>. Previously, other database administrators used the CDBS database<sup>5</sup>, whose operation was clear and understood. Because the Bureau has since migrated to LMS, Nominet were required to be the first database operator to use LMS in place of CDBS. All published material by FCC regarding the application of the TVWS rules to TV data appertains to CDBS.

The changes required to the import procedure were promptly applied on Wednesday 24 October, following the publication of the NAB's concerns on Friday 19 October.

<sup>&</sup>lt;sup>4</sup> https://enterpriseefiling.fcc.gov/dataentry/public/tv/lmsDatabase.html

<sup>&</sup>lt;sup>5</sup> https://www.fcc.gov/media/radio/cdbs-database-public-files

#### 2. Conclusion

Nominet appreciates the opportunity of the NAB's filing to further explain how Nominet's database works and to ensure the continued accuracy and quality our service. We additionally recognize the important role of TVWS database administrators in protecting incumbent licensees from harmful interference more generally.

Respectfully submitted,

Mm M. Joul.

Adam H. Leach

Director of Emerging Technology

#### **NOMINET**

Oxford Science Park Oxford, OX4 4DQ United Kingdom

November 14, 2018

### **Appendix**

#### NAB Case-study 1 (Topeka, KS)

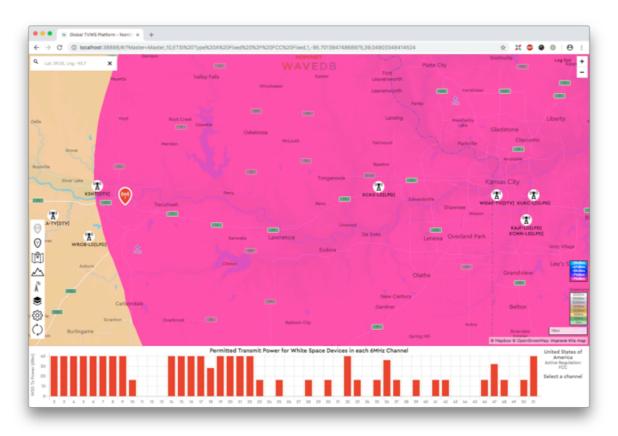
NAB found	WDAF-TV has a DTX record (1kW) and not a DTV record (1MW); channel 34 available in Topeka, KS
NAB expected	WDAF-TV has a DTV (1MW) record and not a DTX record (1kW); channel 34 unavailable in Topeka, KS

```
Row from Nominet's csv dump as at 22<sup>nd</sup> October 2018: 11291,39.0725,-94.596111111111111,BXLCDT-20121102ABY,34,DTX,USA,MO,KANSAS CITY,WDAF-TV,198.2,226.8,468.2,1.0,30.0,5.93E8,6000000.0,
```

Underlying Issue: DTX records taking place of DTV for some callsigns with both records; DTV should be protected and DTX (auxiliary) records should not.

```
Row from Nominet's csv dump as at 24<sup>th</sup> October 2018:
11291,39.0725,-94.596111111111111,BLCDT-
20091008AAW,34,DTV,USA,MO,KANSAS CITY,WDAF-
TV,346.0,347.0,616.0,1000.0,60.0,593000000,6000000.0,
```

Reproduction of NAB's map of case-study (contour of WDAF-TV[DTV] in pink):



Channel 34 is now unavailable in Topeka, KS as expected.

#### NAB Case-study 2 (Augusta, GA)

NAB found	WFXG using channel 36; channel 31 available in Augusta, GA
NAB expected	WFXG using channel 31; channel 31 unavailable in Augusta, GA

# Row from Nominet's csv dump as at 22<sup>nd</sup> October 2018:

3228,33.4169444444445,-

81.834722222223,0000013467,36,DTV,USA,GA,AUGUSTA,WFXG,344.0,384.0,466.0,413.0,56.1595,6.05E8,6000000.0,,,

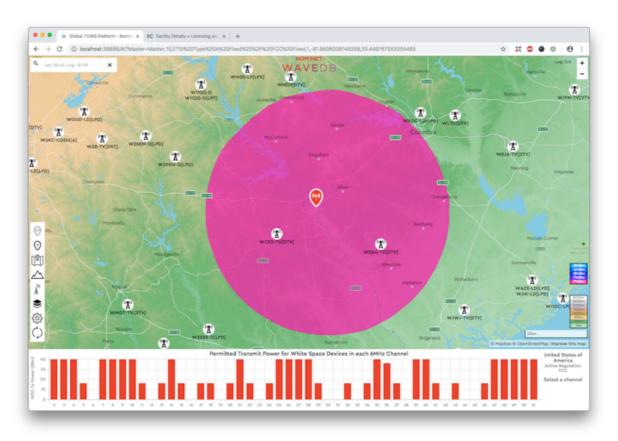
Underlying Issue: Incorrect precedence between the channel taken from **application\_facility.dat** and the channel taken from **facility.dat**.

## Row from Nominet's csv dump as at 24th October 2018:

3228, 33.4169444444445, -

81.8347222222223,0000013467,**31**,DTV,USA,GA,AUGUSTA,WFXG,344.0,384.0,466.0,413.0,56.1595,575000000,6000000.0,,

Reproduction of NAB's map of case-study (contour of WFXG[DTV] in pink):



Channel 31 is now unavailable in Augusta, GA as expected.

### NAB Case-study 3 (Lima, OH)

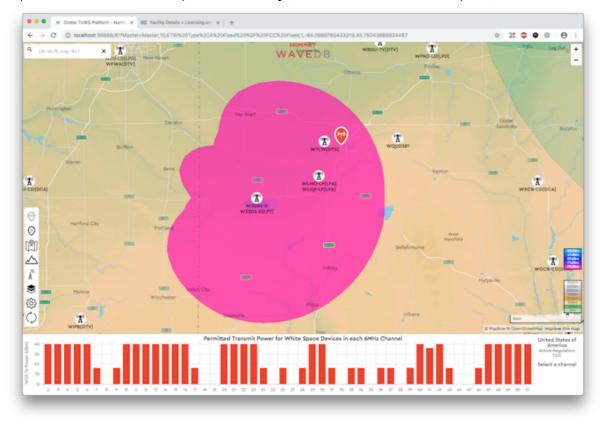
NAB found W32DS-D using channel 25; channel 32 available in Lima, OH	
--	--

Row from Nominet's csv dump as at 22<sup>nd</sup> October 2018 (antenna pattern omitted): 25069, 40.55291666666667, -84.51725, BLDTT-20110104ABK, 25, LPT, USA, OH, MAPLEWOOD, W32DS-D, 142.8, ,412.5, 6.8, 38.3251, 5.39E8, 6000000.0, 0.0,

Underlying Issue: Same root cause as for case-study 2.

Row from Nominet's csv dump as at 24<sup>th</sup> October 2018 (antenna pattern omitted): 25069, 40.55291666666667, -84.51725, BLDTT-20110104ABK, 32, LPT, USA, OH, MAPLEWOOD, W32DS-D, 142.8, ,412.5, 6.8, 38.3251, 581000000, 6000000.0, 0.0,

Reproduction of NAB's map of case-study (contour of W32DS-D in pink):



Channel 32 is now unavailable in Lima, OH as expected.

#### NAB Case-study 4 (Bangor, ME)

NAB found	NAB found	WMEB-TV using channel 9 (DTV facility) and channel 9 (DRT facility);
		channel 25 available in Bangor, ME
	NAD avacated	WMEB-TV using channel 9 (DTV) and channel 25 (DRT); channel 25
	нав ехрестей	unavailable in Bangor, ME

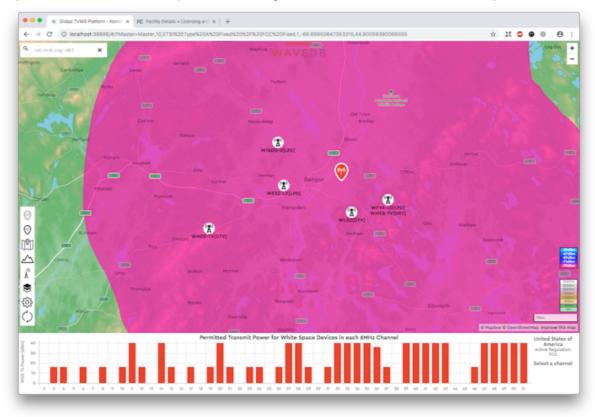
Rows from Nominet's csv dump as at 22<sup>nd</sup> October 2018 (antenna pattern omitted):

```
39648,44.7032222222222,-69.07919444444444,BLEDT-20020508AAS,9,DTV,USA,ME,ORONO,WMEB-TV,127.8,375.0,490.0,15.0,41.7609,1.89E8,6000000.0,0.039648,44.7625,-68.56555555555556,BLEDT-20110729ADO,9,DRT,USA,ME,ORONO,WMEB-TV,101.3,,387.8,15.0,41.7609,1.89E8,6000000.0,0.0
```

Underlying Issue: Same root cause as for case-study 2.

Rows from Nominet's csv dump as at 24th October 2018 (antenna pattern omitted): 39648, 44.7032222222222, -69.07919444444444, BLEDT-20020508AAS, 9,DTV, USA, ME, ORONO, WMEB-TV, 127.8, 375.0, 490.0, 15.0, 41.7609, 189000000, 6000000.0, 0.0 39648, 44.7625, -68.56555555555556, BLEDT-20110729ADO, 25, DRT, USA, ME, ORONO, WMEB-TV, 101.3, ,387.8, 15.0, 41.7609, 539000000, 6000000.0, 0.0

### Reproduction of NAB's map of case-study (contour of WMED-TV[DRT] in pink):



Channel 25 is now unavailable in Bangor, MA as expected.

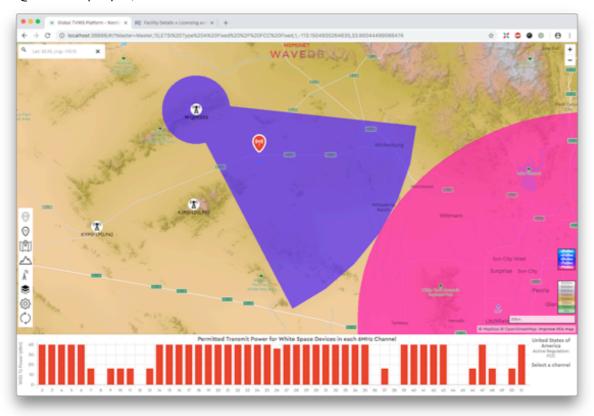
### NAB Case-study 5 (Aguila, AZ)

NAB found	channel 36 available in Aguila, AZ
NAP avported	WQHE250 receiving channel 36 from KAZT-CD; channel 36
NAB expected	unavailable in Aquila, AZ

Underlying issue: Waiver TV and MVPD Receive Sites in Order, DA 12-845 (Docket 04-186) dated June 1, 2012 not imported correctly; now resolved.

Row from Nominet's csv dump (tv\_receive\_site.csv) as at 24<sup>th</sup> October 2018: WQHE250, 34.06527222222222, -113.354725, 36, KAZT-CD, 33.3388888888886, -112.06194444444445

Reproduction of NAB's map of case-study (contour of KAZT-CD in pink, keyhole of WQHE250 in purple):



Channel 36 is now unavailable in Aguila, AZ as expected.